

t4_catalan1 (TMP- GApz7CG98Sq1hTNTbRqds5KWKiAVJ31P)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\\ \neg r1_xxreal_0 X1 X0) \Rightarrow (k2_nat_1 (k7_nat_d X1 (k1_nat_1 X0 np_1)) \\ np_1 = k7_nat_d X1 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (2)$$

Assume the following.

$$k2_xcmplx_0 np_1 np_1 = np_2 \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v7_ordinal1 X0) \wedge (m1_subset_1 X1 k5_numbers)) \Rightarrow \\ (k1_nat_1 X0 X1 = k2_xcmplx_0 X0 X1) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (6)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow ((\neg r1_xxreal_0 X0 np_1) \Rightarrow (k2_nat_1 \\ (k7_nat_d X0 np_2) np_1 = k7_nat_d X0 np_1)) \end{aligned}$$